



PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| MADEMA | | in a factor of the December |
|---|--|--|
| Applicant's or agent's file reference | (Form PCT/ISA/2 | of Transmittal of International Search Report 220) as well as, where applicable, item 5 below. |
| 210121.478PC | ACTION | |
| International application No. | International filing date (day/month/year) | (Earliest) Priority Date (day/month/year) |
| PCT/US 00/18061 | 30/06/2000 | 30/06/1999 |
| Applicant | | |
| CORIXA CORPORATION et al. | | |
| according to Article 18. A copy is being tra This International Search Report consists | | |
| A is also accompanies by | | , |
| 1. Basis of the report | | at a first and another than in the |
| language in which it was filed, unl | international search was carried out on the ba ess otherwise indicated under this item. | |
| Authority (Rule 23.1(b)). | vas carried out on the basis of a translation of | |
| b. With regard to any nucleotide an was carried out on the basis of the | id/or amino acid sequence disclosed in the i e sequence listing : | nternational application, the international search |
| X contained in the internation | onal application in written form. | |
| I | ernational application in computer readable for | rm. |
| | this Authority in written form. | |
|] — | this Authority in computer readble form. | the state of the s |
| international application a | bsequently furnished written sequence listing as filed has been furnished. | |
| the statement that the inf furnished | ormation recorded in computer readable form | is identical to the written sequence listing has been |
| 2. X Certain claims were fou | und unsearchable (See Box I). | |
| 3. X Unity of invention is lac | | |
| | | |
| 4. With regard to the title, | | |
| | ubmitted by the applicant. | |
| the text has been establi | shed by this Authority to read as follows: | |
| | | |
| 5. With regard to the abstract, | | |
| the text is approved as s | ubmitted by the applicant. | |
| the text has been establi | shed, according to Rule 38.2(b), by this Authone date of mailing of this international search re | ority as it appears in Box III. The applicant may, eport, submit comments to this Authority. |
| 6. The figure of the drawings to be pub | olished with the abstract is Figure No. | |
| as suggested by the app | | X None of the figures. |
| because the applicant fa | | |
| because this figure bette | er characterizes the invention. | |



| Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet) |
|--|
| This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: |
| 1. X Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: Although claims 21, 22, 29-31, 34, 35 (insofar an in vivo method is envisaged) |
| and 37-39 are directed to a method of treatment of the human body, the search has been carried out and based on the alleged effects of the compositions. |
| Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: |
| |
| 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). |
| Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet) |
| This International Searching Authority found multiple inventions in this international application, as follows: |
| see additional sheet |
| |
| As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims. |
| As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. |
| 3. X As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.: |
| 1-60 (all partly) |
| |
| 4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: |
| |
| Remark on Protest The additional search fees were accompanied by the applicant's protest. |
| X No protest accompanied the payment of additional search fees. |

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1,2 and 4-60 (all partly and as far as applicable)

Invention 1:

Polypeptide encoded by a polynucleotide sequence recited in SEQ ID NO:1 or polypeptide encoded by sequences that hybridize to a sequence recited in SEQ ID NO:1. Fusion protein comprising said polypeptide. Polynucleotide encoding said fusion protein. Pharmaceutical composition or vaccine comprising said polypeptide, and method for inhibiting the development of a (lung) cancer in a patient, isolated polynucleotide; method for removing tumour cells from a biological sample; method for stimulating and/or expanding T cells specific for a lung tumour protein; isolated T cell population; method for determining or monitoring a cancer in a patient; diagnostic kit; oligonucleotide.

2. Claims: 1-60 (all partly and as far as applicable)

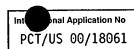
Inventions 2-652:

As invention 1, the subject-matter of said inventions is limited to SEQ ID NOs: 11-13,15,20,23-27,29,30,33,34,39,41,43-46,51,52,57,58,60,62,65-67,69-71,74,76,79,80,84,86,89-92,95,97,98,101,110,111,113-119,121-128,130-134,136,138,139,141,143,146-151,153,154,157-160,162-164,167-178,180,181,183,186-190,192,193,195-220,224,226-231,234,236,237,240,241,244-246,248,254,255,261,262,266,270,275,280,282,283,288,289,290,292,295,301,303,304,309,311,341-782,784-787,790-800,802,804,806-809 and 811-827.

wherein

invention 2 is limited to SEQ ID NO 11 invention 3 is limited to SEQ ID NO 12, etc... invention 652 is limited to SEQ ID NO 827





A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C12N15/12 C07K14/47 A61K38/17 C12Q1/68

CO7K14/705 GO1N33/577 C07K16/18 C07K17/00 C12N15/62

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\frac{\text{Minimum documentation searched (classification system followed by classification symbols)}}{IPC~7~C12N~C07K~A61K~C12Q}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, MEDLINE

| C. DOCUM | INTS CONSIDERED TO BE RELEVANT | |
|------------|--|-----------------------|
| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | WO 97 33993 A (SAGAMI CHEMICAL RESEARCH CENTER; KATO S ET AL.) 18 September 1997 (1997-09-18) whole document especially SEQ ID NO:2 | 1,2,4-60 |
| x | WO 98 31799 A (HUMAN GENOME SCIENCES INC; NI J ET AL.) 23 July 1998 (1998-07-23) whole docement especially pages 16, 42 and 43/ | 1,2,4-60 |
| | | |

| X Further documents are listed in the continuation of box C. | Patent family members are listed in annex. |
|---|---|
| Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "8" document member of the same patent family |
| later than the priority date claimed Date of the actual completion of the international search | Date of mailing of the international search report |
| 2 February 2001 | 1 6. 02. 01 |
| Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 | Authorized officer |
| NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 | Cupido, M |

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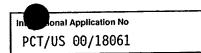


| Interior onal Application No | |
|------------------------------|--|
| PCT/US 00/18061 | |

| | ation) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Tions and to diameter |
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| A | GÜRE ET AL: "Human lung cancer antigens recognized by autologous antibodies: definition of a novel cDNA derived from the tumor suppressor gene locus on chromosome 3p21.3" CANCER RESEARCH, AMERICAN ASSOCIATION FOR CANCER RESEARCH, BALTIMORE, MD,US, vol. 58, 1 March 1998 (1998-03-01), pages 1034-1041, XP002103188 ISSN: 0008-5472 page 1038 | 1-60 |
| Α | CHEN S-L ET AL: "Isolation and characterizaton of a novel gene expressed in multiple cancers" ONCOGENE,GB,BASINGSTOKE, HANTS, vol. 12, no. 4, 15 February 1996 (1996-02-15), pages 741-751, XP002106655 ISSN: 0950-9232 the whole document | 1-60 |
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| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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